



Equipment Operator Training For Asbestos-Contaminated Soil and Debris

1. What level of training do excavator operators need when disturbing asbestos contaminated soil or debris?

The training specified here is specific to worksites where equipment operators are excavating soil that may be contaminated with asbestos debris ("AC soil"), bulk loading debris or demolishing structures where asbestos could not be safely removed prior to demolition.

A single specialized training consistent with OSHA 29 CFR 1926.1101(k)(9)(v) is appropriate when the EPA or OSHA curriculum for Class III work does not adequately cover the training needed to perform the work of this specialized trade. OSHA requires that the employer instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his/her work environment to control or eliminate any hazards or other exposure to illness or injury. (29 CFR 1926.21(b)(2)). Operators may be subject to additional training pursuant to federal/state regulation and/or their employer. Licenses or certifications may be required by local or state agencies.

Topics relevant to excavator operations working in and around AC soils shall include:

- Recognition of Asbestos
- Hazards of Asbestos Excavation and Bulk Loading
- Asbestos Health Effects
- Safe Work Practices
- Other Safety Hazards on Excavation/Demolition Work Sites
- Personal Protective Equipment
- Regulations for Equipment Operators

2. Does asbestos contaminated soil abatement require a special work plan?

Soil remediation must be performed under a site-specific Asbestos Design Plan, or as a Non-Traditional Work Plan (NTWP) approved by the Massachusetts Department of Environmental Protection (MassDEP). The Asbestos Design or NTWP will include site specific parameters including, but not limited to: the description of the work practices, perimeter air monitoring, specialized training or licensure, and decontamination of any site equipment such as heavy machinery or vehicles that are used to facilitate the soil removal. The NTWP may also require that specific licensed professionals remain on site during the project.

3. Is personal protective equipment required for excavator operators during AC soil removal/bulk loading?

The type of PPE required will depend on the site-specific conditions, and whether the operator is inside an enclosed cab. PPE may be required by the employer or specified in the NTWP. Half face respirators and disposable suits may be necessary, based on exposure risks as determined by a licensed professional or the competent person. If prevailing conditions at the work site change, the PPE requirement will need to accommodate any asbestos exposure hazard introduced during the project. The employer is responsible for monitoring and maintaining the equipment to the manufacturer's standards.

4. What work practices must be used when excavating AC soil and/or bulk loading?

General work practices that must be followed include:

- A Department of Labor Standards (DLS) licensed Asbestos Contractor shall be on site throughout the work process.
- All work is to be done wet with no visible emissions.
- All work must comply with the site-specific work practices, means and methods as defined either in the site-specific Asbestos Design or as in the Non-Traditional Work Plan.
- If the site will be inactive, the asbestos containing waste ("ACWM") shall be wet and sufficiently covered with poly sheeting.

5. Is perimeter monitoring required during excavation of AC soil and bulk loading?

Perimeter monitoring is a best practice routinely performed during excavation to ensure that the asbestos contaminated dust is not migrating beyond the designated work area. If elevated levels of asbestos fibers are detected, work practices can immediately be altered to ensure no fugitive dust migrates beyond the work area. MassDEP may require perimeter monitoring during excavation and bulk loading of ACWM, contact your local MassDEP regional office prior to any demolition, bulk loading of debris and bulk loading of asbestos contaminated soil for any additional requirements. Specifics of perimeter monitoring will be included in an Asbestos Design and/or NTWP.

6. Is personal monitoring required for excavator operators during AC soil disturbance and bulk loading?

Personal monitoring can be done to develop a negative exposure assessment (“NEA”). The NEA can then be used on similar work sites, when the prevailing conditions, operator training and work practices are consistent. The NEA is valid for one year. The employer may require personal monitoring on each work site as part of the safety program.

7. Is worker and equipment decontamination required?

Yes, any vehicles or heavy machinery leaving the work site must be decontaminated in a truck wash prior to leaving the work site. All equipment must pass a visual inspection to ensure that no visible debris is present on or in the equipment, such as treads or wheels.

Workers leaving the site may be required to pass through a single chamber decontamination unit, where they remove their protective suit, remove, and wipe their respirator, wipe shoes, and wipe hands and face.

Note: *This guidance document is intended to clarify training requirements and best practices established by DLS for asbestos associated work involving contaminated soil and bulk loading of debris and demolition only. Compliance with this document will not satisfy all the NESHP or MassDEP requirements specific to demolition. It is not intended to satisfy any NTWP required by the MassDEP. For clarification of 310 CMR 7.15 and specific work practices, air monitoring, and NTWPs required for soil excavation, demolition, and bulk loading. Contact your local MassDEP office.*